

REMARKS

## OVERVIEW

Claims 1-8 are pending in this application. The present response is an earnest effort to overcome all rejections such that the Examiner will find all claims in proper form for immediate allowance.

## ISSUES UNDER 35 U.S.C. §103

Claims 1-8 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,531,787 to Lesinski in view of U.S. Patent Number 6,031,317 to Chen. These rejections should be withdrawn because the Examiner has failed to make a *prima facie* of unpatentability by coming forward with proof that establishes that the claims of this matter are obvious. See *In re Piasecki*, 745 F. 2d 1468, 1471-72 (Fed. Cir. 1984). Applicant specifically notes that the Examiner has not made a *prima facie* case as the Examiner has not demonstrated that Lesinski and Chen, the cited references, are analogous or shown that the combination of Lesinski and Chen would have been made by a person of ordinary skill in the art at the relevant time. In addition to not making a *prima facie* case, the references as combined do not teach the claimed invention. Therefore, the rejections to claims 1-8 should be withdrawn.

The Examiner has failed to make a *prima facie* case because the cited references are not analogous. The references are non-analogous as Lesinski was classified under class 623 prosthesis; class 607 surgery: light, thermal, electrical; class 600 surgery; and class 381 electrical, audio signal processing systems and devices. In sharp contrast, Chen is directed to a piezoelectric shock sensor in class 310 electrical generator or motor structure. In addition, none of the field of searches in Lesinski compare with the field of searches in Chen. Furthermore, Chen is not reasonably pertinent to the particular problem with which the Applicant is involved.

Chen, as seen in the abstract and background of the invention, (first paragraph, lines 23-25), deals with shock sensors in the automotive industry for airbag deployment and sensors in the computer industry to detect shock to disk drives and input pins. These applications need both linear shock and rotational shock analyzed. In sharp contrast, Applicant's independent claims require in claim 1 a bone conducting sensing and a microphone sensing pattern, in claim 4 an accelerometer sensor pattern and a microphone sensor pattern, and in claim 8 a microphone sensor and an accelerometer. In conclusion, these references are not analogous to Applicant's invention and therefore, the Examiner has not made a *prima facie* case and the rejections to claims 1-8 should be withdrawn.

The Examiner has also failed to state a *prima facie* case as the combination relied upon by the Examiner would not have been made by a person of ordinary skill in the art at the relevant time. The Examiner has stated it would have been obvious to one having ordinary skill in the art to employ all the components of Lesinski on a single chip such as is taught by Chen, at the time of his invention, since this minimizes the chance of disconnection of the components and because it saves space. Viewing Lesinski as a whole, this is not a proper motivation or suggestion. What the Examiner ignores is that Lesinski is directed towards an implantable system (abstract). Therefore, Lesinski is not directed towards or concerned with air conduction sensing or sensing with a microphone. Moreover, Lesinski explicitly teaches away from the Applicant's claimed invention because the Lesinski device is implantable. Referring to Figure 1 of Lesinski, it is clear that Lesinski is directed towards an implantable system, interior of the ear drum 15. As Lesinski et al recognizes mechanical vibrations are produced at the ear drum (column 7, lines 39-41). The microsensor 28 of Lesinski senses these mechanical vibrations (column 7, lines 58-62). Thus, the microsensor is not used as a microphone, which is readily

apparent given its position. There would be no motivation to use a single chip in Lesinski that included a microphone or air conduction sensor because Lesinski does not even use such a microphone and would not because sensing is not performed in the external auditory canal, but rather in the interior of the ear drum. The Examiner does not address how a person of ordinary skill in the art would have combined Lesinski with Chen to produce Applicant's invention having claims that require in claim 1 a bone conducting sensing and a microphone sensing pattern, in claim 4 an accelerometer sensor pattern and a microphone sensor pattern, and in claim 8 a microphone sensor and an accelerometer. As neither Lesinski nor Chen provide for these limitations, a person of ordinary skill in the art at the relevant time would not have made this combination. Therefore, the Examiner has failed to make a *prima facie* case and the rejections to claims 1-8 should be withdrawn.

Finally, even if the Examiner had made a *prima facie* case, the references, as combined do not teach the claimed invention.

Claim 1 discloses a "bone conduction sensing pattern disposed within the chip" and "a microphone sensing pattern disposed within the chip." Neither Lesinski nor Chen disclose a bone conduction sensing pattern or a microphone sensing pattern. Lesinski, rather, discloses a microsensor adjacent the eardrum which senses mechanical vibrations of the eardrum, (column 7, lines 56-62), a processor which amplifies a signal from the microsensor (Column 8, line 3), and a microactuator which responds to the amplified signals from the microsensor and translate them into vibrations in the inner ear so that the brain may perceive the mechanical vibrations in the outer ear from the microsensor as sound. In sharp contrast, the Applicant's invention uses two sensors as opposed to Lesinski, which uses only one. Also, the Applicant's invention uses a bone conduction sensing pattern and a microphone sensing pattern instead of only a microsensor

adjacent the cardrum. In addition, Chen discloses two sensors offset by 180° rotation which sense mechanical vibrations (abstract) for use in the automotive industries for airbag deployment or the computer industry to detect shocks to disk drives and input pens (column 1, lines 20-25). In marked contrast, the Applicant's invention has a bone conduction sensing pattern and a microphone sensing pattern which not only picks up signals from two different sources but also provides for signal conditioning between the different sources. For the reasons expressed, the claim 1 rejection should be withdrawn and the Examiner should find this claim allowable. As claims 2 and 3 depend from claim 1, these rejections should also be withdrawn.

Claim 4 of the Applicant's invention discloses "A first pattern of piezoelectric polymer being an accelerometer sensor pattern and a second pattern of piezoelectric being a microphone sensor pattern." Neither Lesinski nor Chen disclose a first pattern of piezoelectric polymer being an accelerometer sensor pattern and a second pattern of piezoelectric being a microphone sensor pattern and there is no appropriate motivation or suggestion to combine. For the reasons previously expressed, the Applicant submits that these limitations distinguish claim 4 from the cited references and the Examiner should find claim 4 allowable. As claims 5 and 6 depend from claim 4, these rejections should also be withdrawn.

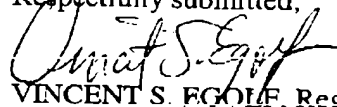
Claim 8 claims "a chip having a microphone sensor and accelerometer." Neither Lesinski nor Chen disclose a chip having a microphone sensor and accelerometer and there is no appropriate motivation or suggestion to combine. For reasons previously expressed, the Applicant submits this limitation distinguishes claim 8 from the cited references and the Examiner should find claim 8 allowable.

## CONCLUSION

Based on the foregoing, Applicant respectfully submits that all pending claims are in condition for immediate allowance, as they are patentably distinguished over prior art. The present amendment does not add any new claims and no fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted and charge any additional fees to Deposit Account 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



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